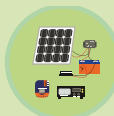


Business Model Development of School Rooftop Solar Power Plant: Public Senior High School & Vocational High School, West Java

WHAT ARE THE TYPES OF BUSINESS MODEL IMPLEMENTATION THAT CAN ANSWER THE SITUATION IN WEST JAVA?



a considerably large target capacity where more than 170 schools are spread out (can install 5 - 15 kWp rooftop solar power plants, each building)



available funding does not overburden the Provincial Government budget (manageable by **Regional-Owned Enterprise (BUMD) in the energy sector**)

APPROACH AND FINDINGS

The business model is structured around a management entity, which can streamline the existing BUMD work units in West Java. Initial funding for the management entity's operations can utilize additional capital placement and subsequently seek to access various alternative sources of financing within West Java and at the national level (blended-financing options). Working partnerships can be established within the management entity structure, while also improving its capital structure, such as joint-ventures, or other similar business cooperation schemes.

School rooftop solar PV installations are expected to operate in the long term (more than 20 years) which requires optimal operational and maintenance work to ensure that the generation performance remains high. Therefore, the benefits of saving electricity consumption costs can also be higher (to improve the ability to make a reasonable return on investment).



PRIMARY RECOMMENDATIONS

The business model implementation plan needs to consider several things, among others:



The need to provide funds for investment in school rooftop solar PV systems, related to funding sources available and accessible to the management entity;



Encouraging funding commitments from existing BUMDs, and optimizing the capital placed by the Provincial Government for the school rooftop solar PV management entity;



Managing various sources of mixed funding, which can begin to be structured with plans for cooperation with appropriate financing institutions, both at the national and West Java levels; and



Alternative options by utilizing additional funding opportunities in the carbon economic value instrument scheme (which, in addition to being applied to coal-fired power plants, will also be applied to other public actors), so that rooftop solar power plants investments can also play a role in the implementation of the scheme.

(Note: the issue of the determination of carbon rights claimed in the control of PLN in the application of solar power plants needs to be addressed, such as the revision on regulations related to customer contracts, PJBL / similar agreements, including the return of carbon rights to solar power plants investments)



SECONDARY RECOMMENDATIONS

The operational reporting of the school rooftop solar power plant was prepared as part of the GHG inventory of the West Java Provincial Government, among others:



Monitoring the achievement of West Java's GHG emission reduction targets in the Energy sector, which can ensure the performance/capacity of renewable energy generation in the long term (technical work & administrative work);



Including the endeavor in climate change mitigation actions (part of provincial obligations in achieving NDC targets, Presidential Regulation 98/2021) so that it is necessary to consider expanding the scope of work that can be managed with the rooftop solar power plants business model, accelerating the increase in installed capacity that reaches general users, communities and businesses in West Java;



Integration of the Regional Low Carbon Development Planning (Perencanaan Pembangunan Rendah Karbon Daerah / PPRKD) reporting scheme, as well as a direct impact on the application of emission ceiling options for businesses and other user institutions.

